

Amendments to the Claims:

Please cancel claims 1-19 presented in the underlying International Application No. PCT/DE2003/002984, as well as the substitute claims 1-17 presented in the international phase.

Please add new claims 20-38 as indicated in the listing of claims below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19 (canceled)

Claim 20 (new): A method for producing a vehicle part with an integrated antenna element, the method comprising:

- providing a plastic substrate by a molding process;
- providing a coating layer by a film coating process; and
- providing at least one antenna element disposed between the coating layer and the plastic substrate.

Claim 21 (new): The method as recited in claim 20 wherein the providing the at least one antenna element is performed during the molding process.

Claim 22 (new): The method as recited in claim 20 wherein the providing the at least one antenna element is performed by applying the at least one antenna element to at least one of the coating film and the plastic substrate by at least one of a structured direct metallization and a screen-printing process.

Claim 23 (new): The method as recited in claim 20 wherein the providing the at least one antenna element includes applying at least one of a punched part of metal adhesive film and an arrangement of lines on a second substrate to at least one of the coating film and the plastic substrate.

Claim 24 (new): The method as recited in claim 20 further comprising preforming the coating layer by a thermoforming process.

Claim 25 (new): The method as recited in claim 21 wherein the providing the at least one antenna element is performed by positioning the at least one antenna element using a mold of the molding process as a reference therefore.

Claim 26 (new): The method as recited in claim 20 further comprising drilling a hole in the plastic substrate after the molding process, the hole being configured to receive an electrical connection.

Claim 27 (new): The method as recited in claim 20 wherein the providing the plastic substrate is performed so as to provide, by a suitable design of the mold of the molding process, an opening through which the antenna element is capable of being contacted.

Claim 28 (new): The method as recited in claim 21 further comprising introducing a conductive insert part during the molding process, the at least one antenna element being contactable via the conductive insert part.

Claim 29 (new): A vehicle part comprising:
a plastic substrate;
a coating layer including a film coating layer bonded to the plastic substrate; and
at least one antenna element disposed between the plastic substrate and the coating layer.

Claim 30 (new): The vehicle part as recited in claim 29 further comprising a contacting device configured to directly contact the at least one antenna element.

Claim 31 (new): The vehicle part as recited in claim 29 further comprising a coupling device configured to electromagnetically couple the at least one antenna element.

Claim 32 (new): The vehicle part as recited in claim 31 wherein the coupling device includes an aperture coupling.

Claim 33 (new): The vehicle part as recited in claim 29 further comprising an electronic component module coupled to the at least one antenna element, the module including at least one of an active and a passive electronic component.

Claim 34 (new): The vehicle part as recited in claim 33 wherein the at least one of an active and a passive electronic component includes at least one of a filter and an antenna amplifier.

Claim 35 (new): The vehicle part as recited in claim 33 further comprising at least one positioning element configured to position the module on the vehicle part in a positionally accurate manner with respect to the at least one antenna element.

Claim 36 (new): The vehicle part as recited in claim 29 further comprising a ground plane.

Claim 37 (new): The vehicle part as recited in claim 36 wherein the ground plane includes at least one of a metal adhesive film, a direct metallization and a screen print.

Claim 38 (new): A vehicle comprising a plastic part, the plastic part comprising:
a plastic substrate;
a coating layer including a film coating layer bonded to the plastic substrate; and
at least one antenna element disposed between the plastic substrate and the coating layer.